International mobility and doctorate holders' career: Some evidence from Spain

Abstract

The completion of the PhD program is understood as a transmission channel to provide high specialization and skills to students pursuing to be employed as highly-qualified workers or researchers. The Bologna Process and the EU Horizon 2020 has enhanced the role of the PhD program as an instrument to achieve the objectives of innovation proposed by the "Europe of Knowledge". Focusing in the Spanish case, PhD programs exert a positive influence on doctorate holders careers since they have a privileged situation in the labour market. For example in 2015, the unemployment and employment rates of the Spanish population were 21% and 58%, respectively; whereas, for the doctorate holders, these percentages were 5% and 80%. Moreover, these workers earn wages that are 60% higher than those received by workers with only primary education. This paper analyzes the influence of having made a stay abroad to complete the doctoral studies on aspects associated with the doctorate holders' careers such as their wages and how their current employment is related to the education acquired. To the best of our knowledge, these topic are unprecedented in literature discussing Spain and are related to interesting issues for students and policymakers that can help knowing the transition between the doctoral studies and the labour market. To reach the objectives proposed, the methodology applied consists in developing a wage econometric model and a probit model showing the mismatch between the training acquired in the doctoral studies and the needs of the current job. In both cases, the dependent variables are explained by a set of variables collecting personal and labour characteristics, and a dummy endogenous regressor showing whether the doctorate holder has had a stay in another country. Data used come from the 2009 Survey on Human Resources in Science and Technology (INE, 2010).